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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,719	08/20/2003	Kenneth J. Fennewald	94004-88254	6120
28997	7590	11/01/2005	EXAMINER	
HARNESS, DICKEY, & PIERCE, P.L.C			KASENGE, CHARLES R	
7700 BONHOMME, STE 400			ART UNIT	PAPER NUMBER
ST. LOUIS, MO 63105			2125	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/644,719	FENNEWALD ET AL.
	Examiner	Art Unit
	Charles R. Kasenge	2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 August 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-44 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 33 is/are allowed.  
 6) Claim(s) 1-5,7,8,10-12,19-21,24,25,28-30,32 and 34-44 is/are rejected.  
 7) Claim(s) 6,9,13-18,22,23,26,27 and 31 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 20 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 8/12/05, with respect to the rejection(s) of the claim(s) under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Clinton, III et al. U.S. Patent 5,520,329.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 7, 8, 10-12, 19-21, 24, 25, 28-30, 32, and 34-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Clinton U.S. Patent 5,520,329. Referring to claims 1, 36, 39, 40 and 41, Clinton discloses a control system that limits the wattage provided by a heat-producing element to a value less than that produced at full line voltage, the system comprising (col. 4, lines 5-16): at least one heat-producing means (col. 4, lines 5-7); a power control means operatively associated with said at least one heat-producing means (col. 4 and 5, lines 62-67 and 1-5); and a power limiting function that limits the wattage provided by said at least one heat-producing means to a value less than that produced at a full line voltage through the use of a scaling function (col. 4, lines 5-16 and col. 6, lines 44-51). Referring to claim 2 and 42-44, Clinton discloses the control system according to claim 1 wherein said power limiting function

and said scaling function resides in a module attached to said at least one heat-producing means or operatively placed between said power control means and said at least one heat-producing means (Fig. 1a).

Referring to claims 3-5, Clinton discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in a module operatively placed between a power source and said power control means (Fig. 1a). Clinton discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in said power control means operatively placed between a power source and said at least one heat-producing means (Fig. 1a). Clinton discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in a module operatively placed between the output of any control device and the control input to said power control means which controls said at least one heat-producing means (Fig. 1a).

Referring to claim 7, 8, 20, 28-30, 34, and 35, Clinton discloses the control system according to claim 1 further comprising a temperature controller, said temperature controller including: a temperature sensing function such that a process temperature operatively associated with said at least one heat-producing means may be determined (col. 3, lines 25-37); a temperature comparison function for comparing a temperature associated with said at least one heat-producing means with a set point temperature and determining the required output (col. 3 and 4, lines 53-67 and 1-4); and an output function that provides, directly or through the use of an ancillary power control means, a method to vary the power supplied to the heat-producing means (col. 4 and 5, lines 62-67 and 1-5).

Referring to claims 10-12, Clinton discloses the variable wattage control system

according to claim 8, wherein said temperature controller operates such that temperature readings are communicated to said temperature controller by said sensing means, and when said temperature readings are so communicated, said temperature controller then provides a re-scaled output to said power controller which limits and re-scales the amount of voltage applied to said at least one power-receiving device, whereby said power controller permits multiple wattage values to be obtained from a single resistance value of said at least one power-receiving device (col. 4, lines 5-16). Clinton discloses the variable wattage control system according to claim 10 wherein said scaling allows said at least one power-receiving device having a single wattage rating to be used as a power-receiving device having multiple wattage applications (col. 4, lines 5-16). Clinton discloses the variable wattage control system according to claim 11 further being capable of powering any type of possible said at least one power-receiving device within a range of possible power ratings, and by change of said scaling factor, such that system operation is matched to the maximum desired power level of said at least one heat producing means (col. 4, lines 5-16).

Referring to claims 19, 21, 24, 25, and 32, Clinton discloses the variable wattage control system according to claim 8 wherein said scaling function is optionally manually preset or is preset prior to shipment to the end user or is electronically communicated to the system or is determined automatically by the system in response to a user input (col. 6, lines 44-51). Clinton discloses the variable wattage control system according to claim 20 wherein a software subsystem is either part of said temperature controller, or part of said power control means, or is a separate arrangement operatively associated between said power control means and said heating-producing means or between said temperature controller and said power control means

(col. 4 and 5, lines 62-67 and 1-5). Clinton discloses the variable wattage control system according to claim 20 wherein said power control means controls power level supplied to said heating-producing means by semiconductor power control or mechanical power switching means (Fig. 1a).

Referring to claims 37 and 38, Clinton implicitly discloses the control system according to claim 36 further comprising: at least one circuit protection device operatively associated with the power receiving device (Fig. 1a). Circuit breakers are common for temperature control systems. Clinton discloses the control system according to claim 36 further comprising at least one filtering device operatively associated with the power receiving device to suppress high frequency component generation (col. 5, lines 17-22)

*Allowable Subject Matter*

4. Claim 33 is allowed.
5. Claims 6, 9, 13-18, 22, 23, 26, 27, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CK  
October 29, 2005

  
**LEO PICARD**  
**SUPERVISORY PATENT EXAMINER**  
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